

December 10, 2012

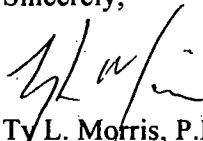
Mr. Jason Gunter  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region 7 - Superfund Branch  
901 North 5<sup>th</sup> Street  
Kansas City, KS 66101

**Re: The Doe Run Company - Leadwood Mine Tailings Site Monthly Progress Report**

Dear Mr. Gunter:

As required by Article VI, Section 50 of the Unilateral Administrative Order (Docket No. CERCLA-07-2006-0272) for the referenced project and on behalf of The Doe Run Company, the progress report for the period September 1, 2012 through September 30, 2012 is enclosed. If you have any questions or comments, please call me at 573-638-5020 or Mark Nations at 573-518-0800.

Sincerely,



Ty L. Morris, P.E., R.G.  
Vice President

TLM/jms  
Enclosures

c: Mark Nations – TDRC  
Matt Wohl – TDRC (electronic only)  
Kathy Rangen – MDNR  
Tim Skoglund – Barr Engineering

07CR

40408422



Superfund

4.2

0400

**Leadwood Mine Tailings Site**  
Leadwood, Missouri  
**Removal Action - Monthly Progress Report**  
Period: September 1, 2012 – September 30, 2012

**1. Actions Performed or Completed This Period:**

- a. No activities were completed at the site during this period.

**2. Data and Results Received This Period:**

- a. During this period, water samples were collected from downstream of Leadwood Dam and the East Seep and Erosion Area, as well as from upstream and downstream of the confluence of Eaton Creek with Big River. The analytical results for this event are included with this progress report.

**3. Scheduled Activities not Completed This Period:**

- a. None.

**4. Planned Activities for Next Period:**

- a. Continue vegetation maintenance activities. The use of biosolids will only be continued if a biosolids management plan has been submitted to and approved by EPA.
- b. It is anticipated that EPA will use this site as a soil repository in the future. Preparations for these activities will continue.
- c. Complete monthly water sampling activities as described in the Removal Action Work Plan.
- d. Complete air monitoring activities as described in the Removal Action Work Plan.

**5. Changes in Personnel:**

- a. None.

**6. Issues or Problems Arising This Period:**

- a. None.

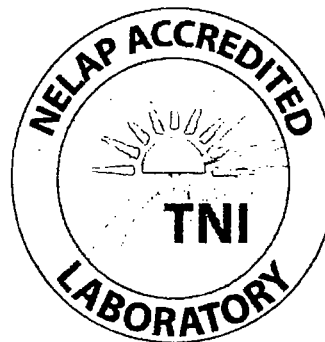
**7. Resolution of Issues or Problems Arising This Period:**

- a. None.

**End of Monthly Progress Report**

October 10, 2012

Stephen Moilanen  
Barr Engineering Company  
1001 Diamond Ridge  
Suite 1100  
Jefferson City, MO 65109  
TEL: (573) 638-5035  
FAX: (573) 638-5001



**RE: Leadwood MTS-25/86-0013**

**WorkOrder: 12091382**

Dear Stephen Moilanen:

TEKLAB, INC received 5 samples on 9/28/2012 10:30:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Michael L. Austin  
Project Manager  
(618)344-1004 ex 16  
MAustin@teklabinc.com

**Client:** Barr Engineering Company

**Work Order:** 12091382

**Client Project:** Leadwood MTS-25/86-0013

**Report Date:** 10-Oct-12

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**This reporting package includes the following:**

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Chain of Custody	Appended

**Client:** Barr Engineering Company**Work Order:** 12091382**Client Project:** Leadwood MTS-25/86-0013**Report Date:** 10-Oct-12**Abbr Definition**

**CCV** Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

**DF** Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.

**DNI** Did not ignite

**DUP** Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.

**ICV** Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

**IDPH** IL Dept. of Public Health

**LCS** Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).

**LCSD** Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

**MB** Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

**MDL** Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

**MS** Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

**MSD** Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

**MW** Molecular weight

**ND** Not Detected at the Reporting Limit

**NELAP** NELAP Accredited

**PQL** Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).

**RL** The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

**RPD** Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

**SPK** The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

**Surr** Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

**TNTC** Too numerous to count ( > 200 CFU )

**Qualifiers**

# - Unknown hydrocarbon

E - Value above quantitation range

M - Manual Integration used to determine area response

R - RPD outside accepted recovery limits

X - Value exceeds Maximum Contaminant Level

B - Analyte detected in associated Method Blank

H - Holding times exceeded

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside recovery limits

**Client:** Barr Engineering Company

**Work Order:** 12091382

**Client Project:** Leadwood MTS-25/86-0013

**Report Date:** 10-Oct-12

**Cooler Receipt Temp:** 5.8 °C

## Locations and Accreditations

Collinsville		Springfield		Kansas City	
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	Address	3920 Pintail Dr Springfield, IL 62711-9415	Address	8421 Nieman Road Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	kmcclain@teklabinc.com	Email	dthompson@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2013	Collinsville
Kansas	KDHE	E-10374	NELAP	1/31/2013	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2013	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2013	Springfield
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2013	Collinsville
Arkansas	ADEQ	88-0966		3/14/2013	Collinsville
Illinois	IDPH	17584		4/30/2013	Collinsville
Kentucky	UST	0073		5/26/2013	Collinsville
Missouri	MDNR	00930		4/13/2013	Collinsville
Oklahoma	ODEQ	9978		8/31/2013	Collinsville

Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

Lab ID: 12091382-001

Client Sample ID: LW-001

Matrix: AQUEOUS

Collection Date: 09/25/2012 9:15

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA 600 375.2 REV 2.0 1993 (TOTAL)</b>								
Sulfate	NELAP	200		691	mg/L	20	10/04/2012 2:55	R168909
<b>STANDARD METHOD 4500-H B, LABORATORY ANALYZED</b>								
Lab pH		1.00		8.17		1	09/28/2012 16:12	R168684
<b>STANDARD METHODS 2340 C</b>								
Hardness, as ( CaCO <sub>3</sub> )		5		1080	mg/L	1	10/01/2012 13:00	R168750
<b>STANDARD METHODS 2540 D</b>								
Total Suspended Solids		6		< 6	mg/L	1	09/28/2012 15:28	R168689
<b>STANDARD METHODS 2540 F</b>								
Solids, Settleable		0.1	H	< 0.1	ml/L	1	09/28/2012 14:05	R168673
<b>STANDARD METHODS 5310 C, ORGANIC CARBON</b>								
Total Organic Carbon (TOC)		1.0		3.3	mg/L	1	10/05/2012 20:21	R169034
<b>EPA 600 4.1.1, 200.7R4.4, METALS BY ICP (DISSOLVED)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 2:58	82017
Zinc	NELAP	10.0		2430	µg/L	1	10/07/2012 2:58	82017
<b>EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 11:38	82038
Zinc	NELAP	10.0		2770	µg/L	1	10/07/2012 11:38	82038
<b>STANDARD METHODS 3030 E, 3113 B, METALS BY GFAA</b>								
Lead		4.00	X	34.5	µg/L	2	10/01/2012 10:33	82018
<b>STANDARD METHODS 3030 B, 3113 B, METALS BY GFAA (DISSOLVED)</b>								
Lead		2.00	X	23.7	µg/L	1	09/29/2012 15:27	82024

**Client:** Barr Engineering Company

**Work Order:** 12091382

**Client Project:** Leadwood MTS-25/86-0013

**Report Date:** 10-Oct-12

**Lab ID:** 12091382-002

**Client Sample ID:** LW-002

**Matrix:** AQUEOUS

**Collection Date:** 09/25/2012 7:40

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA 600 375.2 REV 2.0 1993 (TOTAL)</b>								
Sulfate	NELAP	200		492	mg/L	20	10/04/2012 2:58	R168909
<b>STANDARD METHOD 4500-H B, LABORATORY ANALYZED</b>								
Lab pH		1.00		7.98		1	09/28/2012 16:17	R168684
<b>STANDARD METHODS 2340 C</b>								
Hardness, as ( CaCO <sub>3</sub> )		5		800	mg/L	1	10/01/2012 13:00	R168750
<b>STANDARD METHODS 2540 D</b>								
Total Suspended Solids		6		< 6	mg/L	1	09/28/2012 15:28	R168689
<b>STANDARD METHODS 2540 F</b>								
Solids, Settleable		0.1	H	< 0.1	ml/L	1	09/28/2012 14:05	R168673
<b>STANDARD METHODS 5310 C, ORGANIC CARBON</b>								
Total Organic Carbon (TOC)		1.0		2.2	mg/L	1	10/05/2012 20:28	R169034
<b>EPA 600 4.1.1, 200.7R4.4, METALS BY ICP (DISSOLVED)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 3:09	82017
Zinc	NELAP	10.0		2550	µg/L	1	10/07/2012 3:09	82017
<b>EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 11:42	82038
Zinc	NELAP	10.0		2890	µg/L	1	10/07/2012 11:42	82038
<b>STANDARD METHODS 3030 E, 3113 B, METALS BY GFAA</b>								
Lead		2.00	X	15.9	µg/L	1	09/29/2012 12:28	82018
<b>STANDARD METHODS 3030 B, 3113 B, METALS BY GFAA (DISSOLVED)</b>								
Lead		2.00	X	8.64	µg/L	1	09/29/2012 15:30	82024



Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

Lab ID: 12091382-003

Client Sample ID: LW-Dup

Matrix: AQUEOUS

Collection Date: 09/25/2012 7:50

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA 600 375.2 REV 2.0 1993 (TOTAL)</b>								
Sulfate	NELAP	200		514	mg/L	20	10/04/2012 3:03	R168909
<b>STANDARD METHOD 4500-H B, LABORATORY ANALYZED</b>								
Lab pH		1.00		8.00		1	09/28/2012 16:19	R168684
<b>STANDARD METHODS 2340 C</b>								
Hardness, as ( CaCO <sub>3</sub> )		5		800	mg/L	1	10/01/2012 13:00	R168750
<b>STANDARD METHODS 2540 D</b>								
Total Suspended Solids		6		11	mg/L	1	09/28/2012 15:28	R168689
<b>STANDARD METHODS 2540 F</b>								
Solids, Settleable		0.1	H	< 0.1	ml/L	1	09/28/2012 14:05	R168673
<b>STANDARD METHODS 5310 C, ORGANIC CARBON</b>								
Total Organic Carbon (TOC)		1.0		2.4	mg/L	1	10/05/2012 20:34	R169034
<b>EPA 600 4.1.1, 200.7R4.4, METALS BY ICP (DISSOLVED)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 3:12	82017
Zinc	NELAP	10.0		2540	µg/L	1	10/07/2012 3:12	82017
<b>EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 11:53	82038
Zinc	NELAP	10.0		2940	µg/L	1	10/07/2012 11:53	82038
<b>STANDARD METHODS 3030 E, 3113 B, METALS BY GFAA</b>								
Lead		2.00	X	22.3	µg/L	1	09/29/2012 12:31	82018
<b>STANDARD METHODS 3030 B, 3113 B, METALS BY GFAA (DISSOLVED)</b>								
Lead		2.00	X	8.82	µg/L	1	09/29/2012 15:33	82024

Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

Lab ID: 12091382-004

Client Sample ID: LW-US

Matrix: AQUEOUS

Collection Date: 09/25/2012 10:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA 600 375.2 REV 2.0 1993 (TOTAL)</b>								
Sulfate	NELAP	10		22	mg/L	1	10/04/2012 20:16	R168978
<b>STANDARD METHOD 4500-H B, LABORATORY ANALYZED</b>								
Lab pH		1.00		8.09		1	09/28/2012 16:20	R168684
<b>STANDARD METHODS 2340 C</b>								
Hardness, as ( CaCO <sub>3</sub> )		5		300	mg/L	1	10/01/2012 13:00	R168750
<b>STANDARD METHODS 2540 D</b>								
Total Suspended Solids		6		< 6	mg/L	1	09/28/2012 15:28	R168689
<b>STANDARD METHODS 5310 C, ORGANIC CARBON</b>								
Total Organic Carbon (TOC)		1.0		1.9	mg/L	1	10/05/2012 20:40	R169034
<b>EPA 600 4.1.1, 200.7R4.4, METALS BY ICP (DISSOLVED)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 3:16	82017
Zinc	NELAP	10.0		< 10.0	µg/L	1	10/07/2012 3:16	82017
<b>EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 11:57	82038
Zinc	NELAP	10.0		< 10.0	µg/L	1	10/07/2012 11:57	82038
<b>STANDARD METHODS 3030 E, 3113 B, METALS BY GFAA</b>								
Lead		2.00		< 2.00	µg/L	1	09/29/2012 12:35	82018
<b>STANDARD METHODS 3030 B, 3113 B, METALS BY GFAA (DISSOLVED)</b>								
Lead		2.00		< 2.00	µg/L	1	09/29/2012 15:37	82024

Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

Lab ID: 12091382-005

Client Sample ID: LW-DS

Matrix: AQUEOUS

Collection Date: 09/25/2012 7:15

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA 600 375.2 REV 2.0 1993 (TOTAL)</b>								
Sulfate	NELAP	20		33	mg/L	2	10/04/2012 20:37	R168978
<b>STANDARD METHOD 4500-H B, LABORATORY ANALYZED</b>								
Lab pH		1.00		8.09		1	09/28/2012 16:22	R168684
<b>STANDARD METHODS 2340 C</b>								
Hardness, as ( CaCO <sub>3</sub> )		5		260	mg/L	1	10/01/2012 13:00	R168750
<b>STANDARD METHODS 2540 D</b>								
Total Suspended Solids		6		< 6	mg/L	1	09/28/2012 15:32	R168689
<b>STANDARD METHODS 5310 C, ORGANIC CARBON</b>								
Total Organic Carbon (TOC)		1.0		2.1	mg/L	1	10/05/2012 20:47	R169034
<b>EPA 600 4.1.1, 200.7R4.4, METALS BY ICP (DISSOLVED)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 3:20	82017
Zinc	NELAP	10.0		< 10.0	µg/L	1	10/07/2012 3:20	82017
<b>EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)</b>								
Cadmium	NELAP	2.00		< 2.00	µg/L	1	10/07/2012 12:00	82038
Zinc	NELAP	10.0		< 10.0	µg/L	1	10/07/2012 12:00	82038
<b>STANDARD METHODS 3030 E, 3113 B, METALS BY GFAA</b>								
Lead		2.00		< 2.00	µg/L	1	09/29/2012 12:38	82018
<b>STANDARD METHODS 3030 B, 3113 B, METALS BY GFAA (DISSOLVED)</b>								
Lead		2.00		< 2.00	µg/L	1	09/29/2012 15:47	82024

## Sample Summary

<http://www.teklabinc.com/>

**Client:** Barr Engineering Company

**Work Order:** 12091382

**Client Project:** Leadwood MTS-25/86-0013

**Report Date:** 10-Oct-12

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
12091382-001	LW-001	Aqueous	5	09/25/2012 9:15
12091382-002	LW-002	Aqueous	5	09/25/2012 7:40
12091382-003	LW-Dup	Aqueous	5	09/25/2012 7:50
12091382-004	LW-US	Aqueous	5	09/25/2012 10:25
12091382-005	LW-DS	Aqueous	5	09/25/2012 7:15

## Dates Report

<http://www.teklabinc.com/>
**Client:** Barr Engineering Company

**Work Order:** 12091382

**Client Project:** Leadwood MTS-25/86-0013

**Report Date:** 10-Oct-12

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
12091382-001A	LW-001	09/25/2012 9:15	09/28/2012 10:30		
	Standard Methods 2540 F				09/28/2012 14:05
12091382-001B	LW-001	09/25/2012 9:15	09/28/2012 10:30		
	EPA 600 375.2 Rev 2.0 1993 (Total)				10/04/2012 2:55
	Standard Method 4500-H B, Laboratory Analyzed				09/28/2012 16:12
	Standard Methods 2340 C				10/01/2012 13:00
	Standard Methods 2540 D				09/28/2012 15:28
12091382-001C	LW-001	09/25/2012 9:15	09/28/2012 10:30		
	EPA 600 4.1.4, 200.7R4.4, Metals by ICP (Total)			10/01/2012 8:35	10/07/2012 11:38
	Standard Methods 3030 E, 3113 B, Metals by GFAA			09/28/2012 16:18	10/01/2012 10:33
12091382-001D	LW-001	09/25/2012 9:15	09/28/2012 10:30		
	EPA 600 4.1.1, 200.7R4.4, Metals by ICP (Dissolved)			09/28/2012 15:51	10/07/2012 2:58
	Standard Methods 3030 B, 3113 B, Metals by GFAA (Dissolved)			09/28/2012 19:30	09/29/2012 15:27
12091382-001E	LW-001	09/25/2012 9:15	09/28/2012 10:30		
	Standard Methods 5310 C, Organic Carbon				10/05/2012 20:21
12091382-002A	LW-002	09/25/2012 7:40	09/28/2012 10:30		
	Standard Methods 2540 F				09/28/2012 14:05
12091382-002B	LW-002	09/25/2012 7:40	09/28/2012 10:30		
	EPA 600 375.2 Rev 2.0 1993 (Total)				10/04/2012 2:58
	Standard Method 4500-H B, Laboratory Analyzed				09/28/2012 16:17
	Standard Methods 2340 C				10/01/2012 13:00
	Standard Methods 2540 D				09/28/2012 15:28
12091382-002C	LW-002	09/25/2012 7:40	09/28/2012 10:30		
	EPA 600 4.1.4, 200.7R4.4, Metals by ICP (Total)			10/01/2012 8:35	10/07/2012 11:42
	Standard Methods 3030 E, 3113 B, Metals by GFAA			09/28/2012 16:18	09/29/2012 12:28
12091382-002D	LW-002	09/25/2012 7:40	09/28/2012 10:30		
	EPA 600 4.1.1, 200.7R4.4, Metals by ICP (Dissolved)			09/28/2012 15:51	10/07/2012 3:09
	Standard Methods 3030 B, 3113 B, Metals by GFAA (Dissolved)			09/28/2012 19:30	09/29/2012 15:30
12091382-002E	LW-002	09/25/2012 7:40	09/28/2012 10:30		
	Standard Methods 5310 C, Organic Carbon				10/05/2012 20:28
12091382-003A	LW-Dup	09/25/2012 7:50	09/28/2012 10:30		
	Standard Methods 2540 F				09/28/2012 14:05
12091382-003B	LW-Dup	09/25/2012 7:50	09/28/2012 10:30		
	EPA 600 375.2 Rev 2.0 1993 (Total)				10/04/2012 3:03
	Standard Method 4500-H B, Laboratory Analyzed				09/28/2012 16:19
	Standard Methods 2340 C				10/01/2012 13:00



## Dates Report

<http://www.teklabinc.com/>
**Client:** Barr Engineering Company

**Work Order:** 12091382

**Client Project:** Leadwood MTS-25/86-0013

**Report Date:** 10-Oct-12

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	Standard Methods 2540 D				09/28/2012 15:28
12091382-003C	LW-Dup	09/25/2012 7:50	09/28/2012 10:30		
	EPA 600 4.1.4, 200.7R4.4, Metals by ICP (Total)			10/01/2012 8:35	10/07/2012 11:53
	Standard Methods 3030 E, 3113 B, Metals by GFAA			09/28/2012 16:18	09/29/2012 12:31
12091382-003D	LW-Dup	09/25/2012 7:50	09/28/2012 10:30		
	EPA 600 4.1.1, 200.7R4.4, Metals by ICP (Dissolved)			09/28/2012 15:51	10/07/2012 3:12
	Standard Methods 3030 B, 3113 B, Metals by GFAA (Dissolved)			09/28/2012 19:30	09/29/2012 15:33
12091382-003E	LW-Dup	09/25/2012 7:50	09/28/2012 10:30		
	Standard Methods 5310 C, Organic Carbon				10/05/2012 20:34
12091382-004A	LW-US	09/25/2012 10:25	09/28/2012 10:30		
	EPA 600 375.2 Rev 2.0 1993 (Total)				10/04/2012 20:16
	Standard Methods 2340 C				10/01/2012 13:00
12091382-004B	LW-US	09/25/2012 10:25	09/28/2012 10:30		
	Standard Method 4500-H B, Laboratory Analyzed				09/28/2012 16:20
	Standard Methods 2540 D				09/28/2012 15:28
12091382-004C	LW-US	09/25/2012 10:25	09/28/2012 10:30		
	EPA 600 4.1.4, 200.7R4.4, Metals by ICP (Total)			10/01/2012 8:35	10/07/2012 11:57
	Standard Methods 3030 E, 3113 B, Metals by GFAA			09/28/2012 16:18	09/29/2012 12:35
12091382-004D	LW-US	09/25/2012 10:25	09/28/2012 10:30		
	EPA 600 4.1.1, 200.7R4.4, Metals by ICP (Dissolved)			09/28/2012 15:51	10/07/2012 3:16
	Standard Methods 3030 B, 3113 B, Metals by GFAA (Dissolved)			09/28/2012 19:30	09/29/2012 15:37
12091382-004E	LW-US	09/25/2012 10:25	09/28/2012 10:30		
	Standard Methods 5310 C, Organic Carbon				10/05/2012 20:40
12091382-005A	LW-DS	09/25/2012 7:15	09/28/2012 10:30		
	EPA 600 375.2 Rev 2.0 1993 (Total)				10/04/2012 20:37
	Standard Methods 2340 C				10/01/2012 13:00
12091382-005B	LW-DS	09/25/2012 7:15	09/28/2012 10:30		
	Standard Method 4500-H B, Laboratory Analyzed				09/28/2012 16:22
	Standard Methods 2540 D				09/28/2012 15:32
12091382-005C	LW-DS	09/25/2012 7:15	09/28/2012 10:30		
	EPA 600 4.1.4, 200.7R4.4, Metals by ICP (Total)			10/01/2012 8:35	10/07/2012 12:00
	Standard Methods 3030 E, 3113 B, Metals by GFAA			09/28/2012 16:18	09/29/2012 12:38
12091382-005D	LW-DS	09/25/2012 7:15	09/28/2012 10:30		
	EPA 600 4.1.1, 200.7R4.4, Metals by ICP (Dissolved)			09/28/2012 15:51	10/07/2012 3:20
	Standard Methods 3030 B, 3113 B, Metals by GFAA (Dissolved)			09/28/2012 19:30	09/29/2012 15:47
12091382-005E	LW-DS	09/25/2012 7:15	09/28/2012 10:30		

## Dates Report

<http://www.teklabinco.com/>

**Client:** Barr Engineering Company

**Work Order:** 12091382

**Client Project:** Leadwood MTS-25/86-0013

**Report Date:** 10-Oct-12

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 5310 C, Organic Carbon				10/05/2012 20:47

Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

**EPA 600 375.2 REV 2.0 1993 (TOTAL)**

Batch R168849		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate	10		< 10						10/01/2012	

Batch R168849		SampType: LCS		Units mg/L						Date Analyzed
SampID: LCS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate	10		20	20	0	101.3	90	110	10/01/2012	

Batch R168909		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate	10		< 10						10/03/2012	

Batch R168909		SampType: LCS		Units mg/L						Date Analyzed
SampID: LCS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate	10		20	20	0	99.7	90	110	10/03/2012	

Batch R168978		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate	10		< 10						10/04/2012	

Batch R168978		SampType: LCS		Units mg/L						Date Analyzed
SampID: LCS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate	10		19	20	0	94.6	90	110	10/04/2012	

Batch R168978		SampType: MS		Units mg/L						Date Analyzed
SampID: 12091382-005AMS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate	20		51	20	32.96	90.6	90	110	10/04/2012	

Batch R168978		SampType: MSD		Units mg/L		RPD Limit 10				Date Analyzed
SampID: 12091382-005AMSD										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Sulfate	20		53	20	32.96	99.8	51.07	3.58	10/04/2012	



Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

**STANDARD METHOD 4500-H B, LABORATORY ANALYZED**

Batch R168684		SampType: LCS		Units						
SampID: LCS										
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Lab pH		1.00		7.00	7.00	0	100.0	99.1	100.8	09/28/2012

Batch R168684		SampType: DUP		Units				RPD Limit 10			
SampID: 12091382-001BDUP										Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Lab pH		1.00		8.18				8.170	0.12	09/28/2012	

Batch R168684		SampType: DUP		Units		RPD Limit 10				
SampID: 12091382-002BDUP									Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Lab pH		1.00		8.00				7.980	0.25	
									09/28/2012	

Batch R168684		SampType: DUP		Units		RPD Limit 10				
SampID: 12091382-003BDUP									Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Lab pH		1.00		8.00				8.000	0.00	
									09/28/2012	

Batch R168684		SampType: DUP		Units				RPD Limit 10			
SampID: 12091382-004BDUP										Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Lab pH		1.00		8.09				8.090	0.00	09/28/2012	

Batch R168684		SampType: DUP		Units				RPD Limit 10			
SampID: 12091382-005BDUP										Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Lab pH		1.00		8.10				8.090	0.12	09/28/2012	

**STANDARD METHODS 2340 C**

Batch R168750		SampType: MBLK		Units mg/L						
SampID: MB-R168750										
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Hardness, as ( CaCO3 )		5		< 5						10/01/2012

Batch R168750		SampType: LCS		Units mg/L						
SampID: LCS-R168750										
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Hardness, as ( CaCO3 )		5		1000	1000	0	100.0	90	110	10/01/2012

Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

**STANDARD METHODS 2340 C**

Batch R168750 SampType: MS		Units mg/L								Date Analyzed
SampID: 12091382-005AMS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Hardness, as ( CaCO <sub>3</sub> )	5		660	400	260.0	100.0	85	115	10/01/2012	

Batch R168750		SampType: MSD		Units mg/L				RPD Limit 10		
SampID: 12091382-005AMSD										Date Analyzed
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Hardness, as ( CaCO3 )	5		660	400	260.0	100.0	660.0	0.00	10/01/2012	

**STANDARD METHODS 2540 D**

Batch R168689 SampType: MBLK		Units mg/L								Date Analyzed
SampID: MBLK										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Suspended Solids	6		< 6						09/28/2012	

Batch R168689 SampType: LCS		Units mg/L								Date Analyzed
SampID: LCS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Suspended Solids	6		91	100	0	91.0	85	115	09/28/2012	
Total Suspended Solids	6		101	100	0	101.0	85	115	09/28/2012	
Total Suspended Solids	6		94	100	0	94.0	85	115	09/28/2012	
Total Suspended Solids	6		104	100	0	104.0	85	115	09/28/2012	

Batch R168689		SampType: DUP		Units mg/L				RPD Limit 15		
SampID: 12091382-005B DUP										Date Analyzed
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Suspended Solids	6		< 6				0	0.00	09/28/2012	

**STANDARD METHODS 5310 C, ORGANIC CARBON**

Batch R169034 SampType: MBLK		Units mg/L								Date Analyzed
SampID: ICB/MBLK										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Organic Carbon (TOC)	1.0		< 1.0						10/05/2012	

Batch R169034 SampType: LCS		Units mg/L								Date Analyzed
SampID: ICV/LCS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Organic Carbon (TOC)	10.0		62.1	59.7	0	104.0	90	110	10/05/2012	

Batch R169034 SampType: MS		Units mg/L								Date Analyzed
SampID: 12091382-005EMS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Organic Carbon (TOC)	1.0		6.7	5.0	2.080	91.8	85	115	10/05/2012	

Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

**STANDARD METHODS 5310 C, ORGANIC CARBON**

Batch R169034		SampType: MSD		Units mg/L				RPD Limit 10			
SampleID: 12091382-005EMSD											Date Analyzed
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Organic Carbon (TOC)		1.0		7.1	5.0	2.080	99.6	6.670	5.68	10/05/2012	

**EPA 600 4.1.1, 200.7R4.4, METALS BY ICP (DISSOLVED)**

Batch 82017		SampType: MBLK		Units µg/L						
SampleID: MB-82017										Date Analyzed
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Cadmium	2.00		< 2.00	2.00	0	0	-100	100	10/07/2012	
Zinc	10.0		< 10.0	10.0	0	0	-100	100	10/07/2012	

Batch 82017		SampType: LCS		Units µg/L						
SampID: LCS-82017										Date Analyzed
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Cadmium	2.00		46.5	50.0	0	93.0	85	115	10/07/2012	
Zinc	10.0		487	500	0	97.4	85	115	10/07/2012	

Batch 82017		SampType: MS		Units µg/L						
SampID: 12091382-001DMS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Cadmium	2.00		46.6	50.0	1.5	90.2	75	125	10/07/2012	
Zinc	10.0		2900	500	2430	94.6	75	125	10/07/2012	

Batch 82017		SampType: MSD		Units µg/L				RPD Limit 20		
SampID: 12091382-001DMSD										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Cadmium	2.00		46.3	50.0	1.5	89.6	46.6	0.65	10/07/2012	
Zinc	10.0		2880	500	2430	90.8	2903	0.66	10/07/2012	

**EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)**

Batch 82038		SampType: MBLK		Units µg/L							
SampID: MB-82038											Date
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed		
Cadmium	2.00		< 2.00	2.00	0	0	-100	100	10/07/2012		
Zinc	10.0		< 10.0	10.0	0	0	-100	100	10/07/2012		

Batch 82038		SampType: LCS		Units µg/L						
SampID: LCS-82038										Date
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Cadmium	2.00		50.1	50.0	0	100.2	85	115	10/07/2012	
Zinc	10.0		526	500	0	105.3	85	115	10/07/2012	

Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

**EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)**

Batch 82038		SampType: MS		Units µg/L						
SampID: 12091382-002CMS										
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium		2.00		50.3	50.0	1.2	98.2	75	125	10/07/2012
Zinc		10.0		3360	500	2888	95.0	75	125	10/07/2012

Batch 82038 SampType: MSD		Units µg/L								RPD Limit 20	Date Analyzed
SampID: 12091382-002CMSD		Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
		Cadmium	2.00		50.0	50.0	1.2	97.6	50.3	0.60	10/07/2012
		Zinc	10.0		3340	500	2888	90.0	3363	0.75	10/07/2012

**STANDARD METHODS 3030 E, 3113 B, METALS BY GFAA**

Batch 82018		SampType: MBLK		Units µg/L						
SampID: MB-82018										
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Lead		2.00		< 2.00	2.00	0	0	-100	100	09/29/2012

Batch 82018		SampType: LCS		Units µg/L						
SampID: LCS-82018										Date Analyzed
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	
Lead		2.00		15.4	15.0	0	102.5	85	115	09/29/2012

Batch 82018		SampType: MS		Units µg/L							
SampID: 12091382-001CMS											Date Analyzed
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Lead		4.00		51.0	15.0	34.48	109.8	70	130	10/01/2012	

Batch 82018 SampType: MSD		Units µg/L								RPD Limit 20	Date Analyzed
SampID: 12091382-001CMSD		Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
		Lead	4.00		50.4	15.0	34.48	106.4	50.9548	1.00	10/01/2012

**STANDARD METHODS 3030 B, 3113 B, METALS BY GFAA (DISSOLVED)**

Batch 82024		SampType: MBLK		Units µg/L							
SampID: MB-82024											Date Analyzed
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Lead		2.00		< 2.00	2.00	0	0	-100	100	09/29/2012	

Batch 82024		SampType: LCS		Units µg/L						
SampID: LCS-82024										Date Analyzed
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	
Lead		2.00		13.1	15.0	0	87.6	85	115	09/29/2012

Client: Barr Engineering Company

Work Order: 12091382

Client Project: Leadwood MTS-25/86-0013

Report Date: 10-Oct-12

## STANDARD METHODS 3030 B, 3113 B, METALS BY GFAA (DISSOLVED)

Batch 82024 SampType: MS Units µg/L

SampleID: 12091382-004DMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Lead	2.00		14.8	15.0	0	98.7	70	130	09/29/2012

Batch 82024 SampType: MSD Units µg/L

RPD Limit 20

SampleID: 12091382-004DMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Lead	2.00		14.9	15.0	0	99.0	14.8079	0.30	09/29/2012



## Receiving Check List

<http://www.teklabinc.com/>

**Client:** Barr Engineering Company  
**Client Project:** Leadwood MTS-25/86-0013

**Work Order:** 12091382  
**Report Date:** 10-Oct-12

**Carrier:** Ron Korte

**Received By:** BSJ

**Completed by:**

**On:**

28-Sep-12

Timothy W. Mathis

**Reviewed by:**

**On:**

01-Oct-12

Michael L. Austin

Pages to follow: Chain of custody

Extra pages included

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C 5.8
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

*When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.*

Water - at least one vial per sample has zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Any No responses must be detailed below or on the COC.

Samples received did not meet hold time requirements for Settleable Solids analysis. Client was notified of this exceedence via work order summary.  
TWM 9/28/12

# Teklab Chain of Custody

Pg. \_\_\_\_ of \_\_\_\_

Workorder 12091382

5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone: (618)344-1004 ~ Fax: (618)344-1005

Are the samples chilled? ☒ Yes ☐ No with: ☒ Ice ☐ Blue ice

Preserved in ☒ Lab ☐ Field

Cooler Temp 5.8 Sampler SBM

MO 65109

Comments

Invoice to Mark Nations. Results to Allison Olds and Mark Nations, mnations@doerun.com.  
Matrix is surface water.  
Metals: Cd, Pb, Zn

eMail aolds@barr.com

Phone 573-638-5007

Requested Due Date Standard

Billing/PO Per contract with Doe Run

Sample Date/Time	Preservative Matrix	pH	T.S.S.	Sulfate	Settleable Solids	T.O.C.	Total Metals	Dissolved Metals	Hardness				
9-25-12 09:15	Unpres Aqueous	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9-25-12 07:40	Unpres Aqueous	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9-25-12 07:50	Unpres Aqueous	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9-25-12 10:25	Unpres Aqueous	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9-25-12 07:15	Unpres Aqueous	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unpres Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unpres Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unpres Aqueous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

y *	Date/Time	Received By	Date/Time
	9-25-12 16:00	<i>[Signature]</i>	9/25/12 8:45
	9/28/12 1030	<i>Brenda [Signature]</i>	09/28/12 1030

half of client acknowledges that they have read and understand the terms of this agreement and that they have the authority to sign on behalf of client.